



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/873,023	06/01/2001	Tuan Nguyen	2001 P 09907 US	3237
7590	05/06/2004		EXAMINER	
Siemens Corporation Intellectual Property Department 186 Wood Avenue South Iselin, NJ 08830			BORISOV, IGOR N	
			ART UNIT	PAPER NUMBER
			3629	
DATE MAILED: 05/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

18

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/873,023	NGUYEN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Igor Borissov	3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 June 2001.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-37 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-37 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                          |                                                                             |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                              | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                     | Paper No(s)/Mail Date. _____ .                                              |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|                                                                                                                          | 6) <input type="checkbox"/> Other: _____ .                                  |

## DETAILED ACTION

### ***Claim Objections***

**Claims 3, 16, 26, 30 and 37** are objected to because of the following informalities:

**Claims 3, 16, 26, 30 and 37.** Examiner points out that the phrase "model that represents the electronics assembly system at a material flow level of abstraction" is confusing and not descriptive. Examiner suggests to substitute the phrase: "a material flow level of abstraction" to: "wherein modeling is based on designated parameter", or similar language. Examiner believes that said designated parameters may include: availability of electronic components; range of logical outputs (functionality) of electronic circuits (blocks); or cost values assigned to individual blocks.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 15-37** are rejected under 35 U.S.C. 101 because the claimed method for pricing an electronics assembly system solution for a customer does not recite a limitation in the technological arts. The independently claimed steps of: *providing an electronic assembly system solution, computing a customer benefit associated with the solution; computing a monetary value based on the customer benefit; and collecting from the customer an amount based on the computed value* are abstract ideas which can be performed mentally without interaction of a physical structure. The method steps: *computing a customer benefit* may be understood as merely mental evaluation of future profits using a pencil and a sheet of paper. However, the claimed invention must

utilize technology in a non-trivial manner (*Ex parte Bowman*, 61 USPQ2d 1665, 1671 (Bd. Pat. App. & Inter. 2001)).

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to non-statutory subject matter. However, in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 1-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over McGill (US 6,449,597) in view of Ouimet et al. (US 6,078,893) and further in view of Robertson et al. (US 6,594,799).**

#### **Independent Claims.**

**Claims 1, 15 and 28.** McGill teaches a method and system for automobile manufacturing utilizing a plurality of suppliers of product (automobile) components, wherein the suppliers, rather than being paid for their components, receive revenue in accordance with usage of the product (column 1, lines 45-48; column 5, lines 57-63).

However, McGill does not teach modeling of future benefit in relation to the component price.

Ouimet et al. (hereinafter Ouimet) teaches a method and system for modeling a future demand and product price (column 1, lines 55-65).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify McGill to include modeling a future demand for a

particular product, because it would allow the suppliers to predict the successful auto brands to cooperate with, thereby maximize the revenue.

Also, McGill does not specifically teach electronic assembly.

Robertson et al. (hereinafter Robertson) teaches a method and system for designing electronic circuits upon request, wherein electronic design automation software tools are employed, and wherein said circuits designed may be purchased or leased (column 5, lines 1-19).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify McGill and Ouimet to include that said components include electronic assemblies, because it would increase safety and comfort of the automobiles.

Dependent Claims.

**Claim 2.** See claim 1.

**Claims 3 and 16.** Said method and system, wherein the software tools are employed for representing the electronics assembly system (Robertson; column 5, lines 5-11).

**Claims 4 and 17.** Entering data into an input interface; transferring data from the input interface to a modeling tool; and using the modeling tool utilizing the transferred Data (Ouimet; Figs. 5 and 10; column 4, lines 27-66).

**Claims 5, 18 and 32.** Modeling a future demand for a particular product (Ouimet; column 1, lines 55-65). Information as to *discrete event simulation* is non-functional language and given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *In re Dembiczak* 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999). The specific example of non-functional descriptive material is provided in MPEP 2106, Section VI: (example 3) a process that differs from the prior art only with respect to non-functional descriptive material that cannot alter how the process steps are to be performed. The method steps, disclosed in McGill, Ouimet and Robertson would be performed the same regardless if *modeling is a discrete event simulation*, or not.

**Claims 6 and 19.** See claim 1.

**Claims 7-9, 20-21 and 34-35.** Entering data into an input interface (Ouimet; Figs. 5 and 10; column 4, lines 27-66). Information as to *specific design of the interface* is non-functional language and given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *In re Dembicza* 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999).

**Claims 10 and 22.** See claim 1.

**Claims 11-13.** See claim 1.

**Claim 14.** Said method and system, wherein value corresponding to the price for the electronics assembly solution is collected after the customer benefit is realized (McGill; column 5, lines 57-63).

**Claim 23.** Said method and system, wherein the computed monetary value is based on historical (actual) sales values (Ouimet; column 2, lines 34).

**Claim 24.** Receiving revenue in accordance with usage of the product (column 1, lines 45-48; column 5, lines 57-63). Information as to *the structure of the collected amount* is non-functional language and given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *In re Dembicza* 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999).

**Claim 25.** See claim 15.

**Claim 26.** See claim 16.

**Claim 27.** See claim 22.

**Claim 29.** See claim 15.

**Claims 30 and 37.** See claim 3.

**Claim 31.** See claim 4.

**Claim 32.** See claim 5.

**Claim 33.** See claim 6.

**Claims 34-35.** See claims 20-21.

**Claim 36.** See claim 10.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see form PTO-892).

Any inquiry concerning this communication should be directed to Igor Borissov at telephone number (703) 305-4649.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Weiss, can be reached at (703) 308-2702.

Any response to this action should be mailed to:

***Commissioner of Patents and Trademarks***

***Washington D.C. 20231***

or faxed to:

**(703) 872-9306** [Official communications; including After Final communications labeled "Box AF"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7<sup>th</sup> floor receptionist.

*SR*

*jlw*

JOHN G. WEISS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600